

REMARKS

The amendments to the claims find support in the specification and claims as originally filed. For example, the amendments to Claims 1, 5, 14 and 17 find support in the specification as filed at page 8, lines 7-9 and elsewhere in the specification. The amendments to Claims 4 and 8 find support in the specification, for example, at page 4, lines 22-26, page 7, lines 2-7, and elsewhere in the specification. Claims 22-24 stand canceled by the present amendment.

No new matter is added by the claim amendments.

Claims 1-24 were pending in the application. Claims 1-21 stand rejected, and Claims 22-24 stand canceled, having been withdrawn from consideration. Accordingly, Claims 1-21 are presently under examination.

Claims 1 and 5 stand rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 14-21 stand rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Eigler et al. (U.S. Patent 5,077,210, hereafter "Eigler").

Claims 1-11 and 14-21 stand provisionally rejected under the judicially created doctrine of obviousness double-patenting as allegedly being unpatentable over Claims 1-11 of copending U.S. Patent Application Serial No. 10/333,697.

Applicant respectfully traverses the rejections of Claims 1-11 and 14-21 and the objections to Claims 12 and 13.

The Rejections of Claims 1 and 5 Under 35 U.S.C. §112, Second Paragraph

Claims 1 and 5 stand rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The Examiner alleges that "Claims 1 and 5 are indefinite for reciting the phrase, "wherein the soft base is selected from the group consisting of succinimidyl-6-(biotinamido)hexanoate and iodoacetyl" when read in conjunction with Claim 4 which states that the heterobifunctional linker *is* succinimidyl-6-(biotinamido)hexanoate." (page 2, last paragraph, Office Action dated 12/14/2004).

Applicants note that claim 4 has been amended to recite a solid surface of Claim 1 "wherein the heterobifunctional linker **comprises** succinimidyl-6-(biotinamido)hexanoate" in order to more clearly recite the subject matter of the invention. It is believed that claims 1 and 5 are clear and definite, and that one of ordinary skill in the art would recognize that the heterobifunctional spacer comprises a soft base functional group, but is not a soft base in itself.

Accordingly, Applicant respectfully submits that the rejections of Claims 1 and 5 under 35 U.S.C. §112, second paragraph, are overcome.

The Rejections of Claims 1, 3, 5, 7, 9-14, 16, 17, and 19-21 Under 35 U.S.C. §102(b)

Claims 14-21 stand rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Eigler et al. (U.S. Patent 5,077,210, hereafter "Eigler").

Anticipation under 35 U.S.C. §102 requires that "every element of the claimed invention be identically shown in a single reference." (*In re Bond*, 910 F.2d 831,832 (Fed. Cir. 1990)). Applicant respectfully submits that Eigler fails to disclose every element of the claimed invention, and thus fails to anticipate Claims 14-21.

Applicants acknowledge the Examiner's comments (page 3-4 of the Office Action mailed 12/14/2004) noting that the claims did not recite the limitation that the heterobifunctional linkers be non-covalently chemi-or physisorbed to a soft metal solid support. Applicants draw the Examiner's attention to the present claim amendments which are intended to make clear that the heterobifunctional linkers are indeed non-covalently chemi-or physisorbed to a soft metal solid support.

Eigler is directed to a method for immobilizing a high density of functional organic materials such as proteins on a substrate (Eigler, column 2, lines 8-10). However, Eigler makes clear that such a method requires "strong covalent bonds maintaining the active agent in position" (Eigler, column 2, lines 25-26). Thus, Eigler states that "Thus, there is essentially a four step process which comprises a) selection of a substrate having hydroxyl groups, b) forming a silane film which covalently bonds the hydroxyl groups ..." (column 4, lines 37-40). The covalent nature of the linkages to the substrate are also discussed elsewhere in Eigler (e.g., column 3, lines 17-20, 28-31, 42-45, and 55-65).

The inventions of Claims 14-21 require, among other elements, a soft metal solid support and a heterobifunctional spacer that is non-covalently chemi- or physisorbed to said soft metal solid support via soft metal-soft base bonding. However, unlike the present invention, in which a heterobifunctional spacer must be "non-covalently chemi- or physisorbed to said soft metal solid support via soft metal-soft base bonding," Eigler instead discusses covalent attachment to "silicon, glass, silica, quartz, metal oxides and the like" (column 4, lines 57-58). In fact, Eigler nowhere discusses soft-metal soft base bonding of any kind, nor a spacer being non-covalently chemi- or physisorbed to said soft metal solid support via soft metal-soft base bonding, nor a heterobifunctional spacer being non-covalently chemi- or physisorbed to said soft metal solid support via soft metal-soft base bonding.

Thus, Eigler fails to disclose elements of Claims 14-21, including non-covalent attachment of a heterobifunctional spacer to a soft metal solid support; non-covalent chemi- or physisorption of a heterobifunctional spacer to a soft metal solid support; and non-covalent soft metal-soft base bonding of a heterobifunctional spacer to a soft metal solid support. Accordingly, Eigler fails to anticipate the non-covalent attachment to a soft metal solid support required in Claims 14-21 of the present invention. For at least these reasons, Eigler fails to anticipate Claims 14-21.

Accordingly, in the absence of any direct or indirect disclosure regarding these and other elements, Applicant respectfully submits that Claims 14-21 are not anticipated by Eigler, and that the rejections of Claims 14-21 under 35 U.S.C. §102(b) are overcome.

The Rejections of Claims 1-11 and 14-21 under the Judicially Created Doctrine of Obviousness-Type Double Patenting

Claims 1-11 and 14-21 stand provisionally rejected under the judicially created doctrine of obviousness double-patenting as allegedly being unpatentable over Claims 1-11 of copending U.S. Patent Application Serial No. 10/333,697.

In order to expedite prosecution of the claims to issue, and without acquiescing to the rejections, Applicants provide herewith a Terminal Disclaimer over Claims 1-11 of co-pending U.S. Patent Application Serial No. 10/333,697.

The Objections to Claims 12 and 13

Claims 12 and 13 stand objected to by the Examiner. However, Claims 12 and 13 are believed to depend from allowable claims. Claims 12 and 13 are believed to be directed to subject matter that is novel and not obvious in view of the prior art.

Accordingly, Applicant submits that Claims 12 and 13 are allowable and requests their allowance.

CONCLUSION

Applicant respectfully submits that Claims 1-21 stand in allowable form, and respectfully request the reconsideration and allowance of Claims 1-21. Early notification of the allowance of the application is respectfully requested.

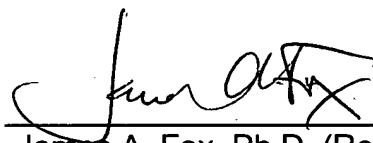
The Examiner is invited to contact the undersigned attorney at the telephone number indicated below should he find that there are any further issues outstanding.

Please charge any fees, including fees for extension of time, or credit overpayment to Deposit Account No. **08-1641**, referencing Attorney's Docket No. **25527-0001 C1**.

Respectfully submitted,

Dated: February 10, 2005

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